Meeting: 1002, Pittsburgh, Pennsylvania, SS 6A, Special Session on Mathematical Modeling of Nonlinear Phenomena in Biology and Mechanics

1002-92-189   **William C Troy*** (`troy@math.pitt.edu`), Mathematics Department, University of Pittsburgh, Pittsburgh, PA 15260. *A two dimensional neural model.*

We study a two dimensional neural model derived from the Wilson-Cowan equations. The model supports spiral waves, ring waves and periodic plane waves. Movies will be shown illustratiing the connection between the model and its use in predicting these waves in the cortex of the rat. (Received September 14, 2004)